NEW MEXICO
ENVIRONMENT DEPARTMENT

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BUTCH TONGATE
Cabinet Secretary

J. C. BORREGO
Deputy Secretary

Certified Mail - Return Receipt Requested

April 23, 2018

Mr. David Arnold, Owner
Wines of San Juan
233 Highway 511
Blanco, New Mexico 87412

Re: **Wines of San Juan; SIC 2084; NPDES Compliance Evaluation Inspection; NPDES # NMU001964; April 4, 2018**

Dear Mr. Arnold;

Enclosed please find a copy of the report and check list for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Introduction, detailed site observations, and findings noted during this inspection are discussed in the "further explanations" section of the inspection report.

You are encouraged to review the inspection report, required to correct any problems noted during the inspection, and advised to modify your operational and/or administrative procedures, as appropriate. If you have comments on or concerns with the basis for the findings in the NMED inspection report, please contact us (see the address below) in writing within 30 days from the date of this letter. Further, you are encouraged to notify in writing both the USEPA and NMED regarding modifications and compliance schedules at the addresses below:

Robert Houston
US Environmental Protection Agency, Suite 1200
Enforcement Branch (6EN-WS)
1445 Ross Avenue
Dallas, Texas 75202-2733

Sarah Holcomb, Program Manager
New Mexico Environment Department
Surface Water Quality Bureau
Point Source Regulation Section
P.O. Box 5469
Santa Fe, New Mexico 87502

Wines of San Juan
April 23, 2018
NMU001964

If you have any questions about this inspection report, please contact Daniel Valenta at 505-827-2575 or at daniel.valenta@state.nm.us.

Sincerely,

/s/Sarah Holcomb

Sarah Holcomb
Surface Water Quality Bureau

Cc: Carol Peters-Wagnon, USEPA (6EN-WM) by e-mail
David Long, USEPA (6EN-WM) by e-mail
Amy Andrews, USEPA (6EN-WM) by e-mail
David Esparza, USEPA (6EN-WM) by e-mail
Robert Houston, USEPA (6EN-WS) by e-mail
Darlene Whitten-Hill, USEPA (6EN-WC) by e-mail
Nancy Williams, USEPA (6EN-WC) by e-mail
Robert Italiano, NMED District II by e-mail

Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code	NPDES	yr/mo/day	Inspec. Type	Inspector	Fac Type
N	NMU001964	180404	~	S	2

Remarks: UNPERMITTED DISCHARGE

Inspection Work Days	Facility Evaluation Rating	BI	QA	Reserved
	1	N	N	

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number*

Wines of the San Juan, 233 Highway 511@Turley, Blanco, New Mexico 87412

San Juan County

Entry Time /Date
1055 Hours/4-4-2018

Permit Effective Date
6-4-2015

Exit Time/Date
1239 Hours/4-4-2018

Permit Expiration Date
6-4-2020

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

David Arnold/Owner/505-632-0879

Other Facility Data

N. 35.083
W. -106.71494

SIC 2084
Sector U

Name, Address of Responsible Official/Title/Phone and Fax Number

Mr. David Arnold, 233 Highway 511@Turley, Blanco, New Mexico 87412/Owner/505-632-0879

Contacted: Yes * No

Section C: Areas Evaluated During Inspection

(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

U	Permit	N	Flow Measurement	U	Operations & Maintenance	N	CSO/SSO
N	Records/Reports	N	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
U	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
U	Effluent/Receiving Waters	N	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

1. **Inspectors arrived on site at 1055 on 4/4/2018, conducted entrance interview with Mr. David Arnold, during which the Inspectors made introductions, showed credentials and explained the purpose of the inspection.**

2. **This report is based on a review of the files maintained by the permittee and NMED, on-site observations by NMED personnel, and verbal information provided by the facility's representative.**

3. **An exit interview to discuss the preliminary finding of the inspection was conducted at approximately 12.39 on 4/4/2018 with Mr. David Arnold at the site.**

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephone/Fax	Date
DANIEL VALENTA */s/Daniel Valenta*	NMED/SWQB 505-827-2575	4/23/2018
Signature of Management QA Reviewer	**Agency/Office/Phone and Fax Numbers**	**Date**
JENNIFER FOOTE */s/Jennifer Foote*	505-827-0596	4/23/2018

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Further Explanation

Introduction

On April 4, 2018, a Compliance Evaluation Inspection (CEI) was conducted at Wines of the San Juan at 233 Highway 511, Blanco, New Mexico 87412 in San Juan County by Mr. Daniel Valenta and Ms. Sandra Gabaldon of the New Mexico Environment Department (NMED) Surface Water Quality Bureau (SWQB) and Mr. Matthew Smith and Mr. Jason Merman of the Ground Water Quality Bureau.

Upon arrival at 1055 hours on April 4, 2018 the inspectors made introductions, stated the purpose of the inspection and presented credentials to the Owner, Mr. Arnold. The inspector briefly toured the facility. Following the tour, an on-site exit interview to discuss preliminary findings was conducted with Mr. Arnold. The inspector left the facility at approximately 1239 hours.

This report is based on review of EPA's on-line notice of intent (eNOI & ICIS) database, files maintained by NMED, and on-site observation by NMED personnel, and verbal information provided by the operator's on-site representative.

Process wastewater discharges from the wine processing building are occurring into the San Juan river in the San Juan River basin, Segment 20.6.4.405 of the State of New Mexico Standards for Interstate and Intrastate Surface Waters, New Mexico Administrative Code (NMAC). Designated uses are irrigation, high quality coldwater aquatic life, livestock watering, public water supply, wildlife habitat, industrial water supply and primary contact. This part of the San Juan has a TMDL for sedimentation and E coli. More information can be found at https://www.env.nm.gov/swqb/Projects/SanJuan/TMDL1/index.html.

Clean Water Act (CWA) and Industrial Stormwater Permit Requirements

Section 301 (a) of the Federal Water Pollution Control Act states that *"Except as in compliance with this section and sections 302, 306, 307, 318, 402 and 404 of this Act, the discharge of any pollutant by any person shall be unlawful."* Federal regulations in 40 CFR Part 122.21(a) Duty to apply (1) states: *"Any person who discharges or proposes to discharge pollutants…must submit a complete application to the Director in accordance with this section and part 124 of this chapter."*

The Clean Water Act prohibits discharges of "pollutants" through a "point source" into a "water of the United States" unless it is in accordance with the National Pollutant Discharge Elimination System (NPDES) permit. The permit will contain discharge limits, monitoring and reporting requirements, and other provisions to ensure that the discharge protects human health and the environment. The permit translates general requirements of the Clean Water Act into specific provisions tailored to the operations of each facility. It means any discernible, confined and discrete conveyance, such as a pipe, ditch, channel, tunnel, conduit, discrete fissure, or container. The term pollutant includes any type of industrial, municipal, and agricultural waste discharged into water. Some examples are dredged soil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, and industrial, municipal, and agricultural waste.

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The characteristics of wastewater from wine production depend on the type and amount of wine produced and the operation of the winemaking facility. Not only is the volume of wastewater extremely variable, the quality and strength is as well. Generally, the wastewater has a high pH range and a high concentration of organic material, dissolved salts, and suspended solids.

Wastewater Characteristics

Pollutants	Units	Wastewater Characteristics		Untreated Domestic Sewage
		During Vintage	During Non-Vintage	
Load Duration	Days	75	290	-
BOD_5	mg/l	500 – 12,000	300 – 3,500	110 – 400
pH	s.u.	2.5 – 9.5	4 – 7	7
Total dissolved solids	mg/l	80 – 2,900	200 – 700	280 – 850
Total suspended solids	mg/l	40 – 800	10 – 400	100 – 350
Total phosphorous	mg/l as P	1 – 10	1 – 40	4 – 15
Total nitrogen	mg/l as N	1 – 40	1 – 40	20 – 85

(Data sources: CA Central Coast RWQCB WDR for Wineries (2008), CA Napa Winery Waste Management Report (2009), Winewatch Factsheet (Australia) (2009), Shepherd, Grismer, Tchobanoglous (2014))

Sources of organic material in wastewater include product loss (juice, wine, and lees), residues in cleaning waste and from diatomaceous earth filters, and solids such as skins and seeds.
Concentrations of organic material are typically greatest during activities like crush and racking. The concentrations of organic materials from these activities can be more than ten times greater than that of domestic sewage. Bottling activities (typically in late winter) also generate wastewater with high levels of organic materials.

- **Acidity**

  Wastewater is typically slightly acidic, with a water pH of 6.5 to 6.9, but can vary from mildly acidic (pH = 5.0) to significantly basic (pH = 10.0). Activities and materials that can affect the water pH of wastewater include ion exchange (acidic), product loss (juice, wine, and lees) (acidic), cleaning agents (basic or acidic), and the microbial metabolism of organic substrates during storage of wastewater further acidifies the wastewater. The acidity of wastewater is listed as pH in Table 4 above.

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- **Salinity**

  Activities and materials that affect the salinity of wastewater include alkali washing (caustic), product loss (juice, wine, and lees), ion exchange, and saline water used for cleaning. Typically, the largest source of high salt concentrations in wastewater is the water supplied to the winemaking facility. The concentration of salinity in wastewater is listed as total dissolved solids (TDS) in Table 4 above. Typically, a percentage of the TDS is organic, which will generally decompose into its component elements. When discharging as irrigation to managed vegetation, the organic portion of TDS can be utilized by plants and microorganisms in the soil. Fixed dissolved solids (FDS) are also a concern for Permittees that discharge wastewater as irrigation to managed vegetation or as road dust abatement. The FDS is primarily that portion of the TDS that consists of inorganic constituents, which can accumulate in the soil.

- **Solids**

  Activities and materials that contribute solids to wastewater include product loss (juice, wine, and lees), residues in caustic/citric acid cleaning waste, residues in diatomaceous earth filter waste, and skins and seeds bypassing screens and filters. Large suspended matter consists of leaves, stems, seeds, and fruit skins. The smaller suspended solids include dead yeast cells (lees), grit, dirt, bentonite, and diatomaceous earth. The concentration of solids in wastewater is listed as total suspended solids (TSS) in the table above.

Findings:

As of the time of the inspection, the facility did not have either an active or expired NPDES permit in place for the discharges into the San Juan river. More information and how to apply for a NPDES permit can be found at https://www.epa.gov/npdes. According to the facility representative the pipe has been in place for around a year. Per Mr. Arnold the discharges depend upon the activities that occur at the winery. Peak volumes of discharge occur during harvest and grape crushing time. Harvest usually starts the first week of August and continues until about mid-October. The pipe discharges to a segment of the San Juan that is dry when the river is low and flows when the river is high. Flow in the river is controlled by releases from Navajo lake. Wines of the San Juan is a small family run operation that produces 3 to 4 thousand cases of wine annually.

Note: On April 17 a letter was received from Mr. Arnold explaining how his facility was planning on ending any discharge into the San Juan, see attachment 1.

NMED/SWQB
Site Overview

	Google Maps	
City/County: Blanco/San Juan		
Location: 233 Highway 511@Turley, Blanco, New Mexico 87412		
Subject: Wines of the San Juan facility. Arrows point to the processing building and discharge outfall.		

Official Photograph Log

Photo # 1

Photographer: Daniel Valenta	Date: 4/4/2018	Time: 1137 hours
City/County: Blanco/San Juan		
Location: 233 Highway 511@Turley, Blanco, New Mexico 87412		
Subject: Grape processing area, note floor drains. The floor drains are piped to the San Juan.		

Official Photograph Log

Photo # 2

Photographer: Daniel Valenta	Date: 4/4/2018	Time: 1138 hours
City/County: Blanco/San Juan		
Location: 233 Highway 511@Turley, Blanco, New Mexico 87412		
Subject: Grape processing area, note floor drains. The floor drains are piped to the San Juan.		

Official Photograph Log

Photo # 3

Photographer: Daniel Valenta	Date: 4/4/2018	Time: 1114 hours
City/County: Blanco/San Juan		
Location: 233 Highway 511@Turley, Blanco, New Mexico 87412		
Subject: The floor drains are piped to this side channel which flows to the San Juan. This side channel flows when the river is high. The red arrow is pointing to the discharge pipe.		

Attachment 1

WINES OF THE SAN JUAN

LOCAL WINE INTERNATIONAL AWARDS

David Arnold, owner
Wines of the San Juan
233 Hwy 511
Blanco, New Mexico 87412
w- 505-632-0879
c- 970-749-8938

Dear Mr. Valenta,

Because of the visit to our winery by yourself and other staff members of the New Mexico Environment Department, I am aware of violations pointed out, and am working to address the issues of the discharges from the winery floor drain and storm water runoff.

As for the storm water runoff problem, my fuel storage stand (two stainless 55 gallon barrels with diesel and gasoline for tractors and mowers, etc.) I plan to move them to an undercover location out of weather exposure.

My waste oil will be taken to a local Jiffy Lube in Bloomfield.

I will be installing an above ground storage tank on a cement pad to impound the discharge from the floor drains that collect all the discharge from the winery and crush pad area. The contents of this tank will be hauled to the Farmington waste water facility on an as needed basis.

Grape solids (skins, seeds, lees and stems) are composted and used to fertilize and add organic matter to the soils in the vineyard.

By taking these steps, all of our waste will be hauled away or composted.

Composite samples of discharge are going to be impossible to collect until the harvest season is past because our discharges vary depending upon winery activities. Harvest and crush are our peak volume of discharge. Most of the cleaning at that time of year is with high pressure hot water generated by a Hotsy pressure washer. Harvest usually starts the first week of August and continues until about mid-October.

Hopefully, the containment tank will be in place within the next couple of weeks, and all possible containment from Wines of the San Juan into surface or groundwater will be eliminated.
Contaminant

Sincerely,

David L. Arnold